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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,521	12/21/2001	Christopher F. Bevis	22120-06499	5910

758 7590 04/14/2003

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EXAMINER
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DO, THUAN V

ART UNIT	PAPER NUMBER
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2825

DATE MAILED: 04/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/029,521	Applicant(s) BEVIS, CHRISTOPHER F.	
	Examiner Thuan Do	Art Unit 2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/21/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6</u> . | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-23 are pending in this office action.

#### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### **Oath address**

The address of inventor Christopher Bevis is missing. According to MPEP 605.03 it should be provided.

#### ***Claim objection***

Claim 1, the terms "a target structure" and recipe parameters are unclear to what applicant intend to mean. Correction is required.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in-

- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being unpatentable over Hasan, Pub. No. 2002/0165636 .

**Regarding claim 1:** Hasan teaches a method comprising:  
accessing mask set data (Page 1, paragraph 0004 );

recognizing a target structure in the mask set data (Page 4, paragraph 0035 where Hasan teaches a setup target information) ; and

configuring the recipe parameters responsive to the recognized target structure (Page 4, paragraph 0035 where Hasan teaches a setup target system using "recipes, for use measuring process parameters").

**Regarding claim 2:** Hasan teaches a method with a process layer (Page 1, paragraph 0006).

**Regarding claim 3:** Hasan teaches a method with (Page 4, paragraph 0035).

**Regarding claim 4:** Hasan teaches a method with overlay target (Page 1, paragraph 0005).

**Regarding claim 5:** Hasan teaches a method comprising:  
receiving design data describing a die (Page 1, paragraph 0004 );  
extracting parameters from the design data relevant to the configuration of the instrument (Page 1, paragraph 0006 and page 4, paragraph 0035 Hasan teaches "extracting information about a structure" and "recipes, for use measuring process parameters" respectively. Examiner thinks that when using extracting a structure information and use measuring process parameters for measurement system that imply this claimed feature);

applying the extracted parameters to at least one die on the wafer (Page 1, paragraph 0006) ; and

creating the recipe from the applied extracted parameters, the recipe for performing the task (Page 4, paragraph 0035).

**Regarding claim 6:** Hasan teaches a method with inspection and metrology (Page 1, paragraph 0003).

**Regarding claim 7:** Hasan teaches a method with a stepper setup file (Page 1, paragraph 0005).

**Regarding claim 8:** Hasan teaches a method with element names and instance types (Page 1, paragraph 0005 using adjustment process).

**Regarding claim 9:** Hasan teaches a method with inspecting the wafer (Page 1, paragraph 0005 using microscopes).

**Regarding claim 10:** Hasan teaches a method with micro inspection (Page 1, paragraph 0005 using microscopes).

**Regarding claim 11:** Hasan teaches a method with macro inspection (Page 1, paragraph 0008 by using "examining a database of calculated signatures or model" for macro inspection).

**Regarding claim 12:** Hasan teaches a method with darkfield inspection (Page 1, paragraph 0004 by using exposing sources).

**Regarding claim 13:** Hasan teaches a method with measuring the wafer (Page 1, paragraph 0005).

**Regarding claim 14:** Hasan teaches a method with film measurement (Page 1, paragraph 0005).

**Regarding claim 15:** Hasan teaches a method with critical dimension measurement (Page 9, paragraph 0068).

**Regarding claim 16:** Hasan teaches a method with overlay measurement (Page 1, paragraph 0005).

**Regarding claim 17:** Hasan teaches a system comprising:  
an access module to access the design data (Page 4, paragraph 0035);  
an analyzer to extract parameters from the design data (Page 4, paragraph 0038 ) ; and  
a configuration module to produce a recipe for controlling one of an inspection and a metrology instrument (Page 4, paragraph 0035).

**Regarding claim 18:** Hasan teaches a system with network interface (Page 4, paragraph 0040 Hasan uses a network interface ).

**Regarding claim 19:** Hasan teaches a system with overlay recipe extraction (Page 1, paragraph 0005 and page 4, paragraph 0038).

**Regarding claim 20:** Hasan teaches a system with inspection recipe extraction (Page 4, paragraph 0038 ).

**Regarding claims 21,22:** Hasan teaches a system with the recipe (Page 4, paragraph 0035).

**Regarding claim 23:** Hasan teaches an instrument comprising:

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an input interface for accessing the design data (Page 4, paragraph 0040 Hasan uses a network interface );

an analyzer to recognize target structures in the design data (Page 4, paragraph 0038 using analyzed parameters of model target structures); and


a recipe module creating a recipe in accordance with the recognized target structures (Page 4, paragraph 0035).

### CONTACT INFORMATION

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan Do whose telephone number is 703-305-2362. The examiner can normally be reached on Monday-Friday 8:30-5:30 (except 2nd Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 703-308-1323. The fax phone numbers for the organization where this application or proceeding is assigned are 703305-3431 for regular communications and 703-305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0596.

  
Thuan Do  
Patent examiner  
4/3/03